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3. The Clerk of this Court shall forthwith forward to the Natural Resources Commission a certified copy of the Petition, and a certified copy of this Entry....
4. The Natural Resources Commission shall make a determination in respect to said Petition in accordance with IC 14-33-2-17, inclusive.
5. The Natural Resources Commission shall file a report in this Court in accordance with IC 14-33-2-22 as soon as practicable but in any case within one hundred twenty (120) days of the date of this Entry.

...

As a consequence, the Commission, on January 5, 2010, circulated letters to state and local governments for comment.

On March 26, 2010, the Commission filed "Motion for Extension" in which to file its report. The Motion stated, "The Natural Resources Commission is scheduled to consider the hearing officer's report at its next scheduled meeting set for May 18, 2010. The Commission's May meeting does not allow it to submit the report to the Court timely unless an extension is granted." On March 30, 2010, the Johnson Superior Court granted the motion for extension of time. The Commission is provided until May 25, 2010, to file its report under IC 14-33-2-22.

Pursuant to the Johnson Superior Court Order and to Ind. Code § 14-33-2-19, a public hearing was held as scheduled on February 23, 2010, in the Prince's Lakes Town Hall, 14 East Lakeview Drive, Prince's Lakes, Indiana, Johnson County. Notice of the public hearing was published on January 25, 2010 in the *Daily Journal*, a newspaper of general circulation in Johnson County.

B. Summary of Evidence Received at Public Hearing

Jennifer M. Kane was appointed as the Commission's hearing officer. Kane opened the public hearing as scheduled in Prince's Lake, Indiana on February 23, 2010 to receive comments on the proposed Northwest Lake Conservancy District. She outlined the statutory responsibilities of the Commission pertaining to the review of a proposed conservancy district. Attending the public hearing were Alan M. Hux, attorney for the Petitioners, Roger M. Kottlowski, and Jomary Baller from the Department of Natural Resources, Division of Water.

The Petitioner was represented by attorney, Alan M. Hux. Kane then called upon Hux to present evidence in support of the petition.

Petitioner and Supporting Evidence

Alan Hux explained the representative of the Northwest Lake Homeowner's Association, Karen Dark, "a nurse, was called away in an emergency and was unable to appear for the public hearing. For the record, I have spoken with the hearing officer, Jennifer Kane, [who] indicated that we could file 'pre-filed' testimony, which would place Ms. Dark's testimony in front of the hearing officer."

Hux introduced the following exhibits:

Petitioners' Exhibit 1: Petition for the Establishment of the Northwest Lake Conservancy District;

Petitioners' Exhibit 2: Proposed Northwest Lake Conservancy District Boundary Map (aerial overlay);

Petitioners' Exhibit 3: Northwest Lake Dam Rehabilitation Project, Prince's Lake, Indiana;

Petitioners' Exhibit 4: Correspondence from Commonwealth Engineers, Inc. to Karen Dark, dated February 22, 2010;

Petitioners' Exhibit 5: Northwest Lake Dam Improvements Project, Budget Summary;

Petitioners' Exhibit 6: Northwest Lake Lot Owners Association, Inc., Northwest Lake Dam Improvements, dated March 2009, prepared by Commonwealth Engineers, Inc.; and

Petitioners' Exhibit 7: Affidavit of Karen Dark.¹

Hux then introduced Roger M. Kottlowski to testify in favor of the proposed Creation of Northwest Lake Conservancy District. His testimony is summarized² as follows:

Roger M. Kottlowski, Professional Engineer, Project Manager for Commonwealth Engineers, Inc., testified that he reviewed the problems with the Northwest Lake dam and the spillway; and as a consequence prepared a report (Petitioners' Exhibit 4), which sets forth the "work needed" to repair the damages sustained in the June 2008 flood event.

Kottlowski explained that the Northwest Lake dam was "overtopped...by a major flood, almost eleven inches within six hours; it was an extreme rainfall event". Northwest Lake dam sustained damage on the downstream side of the dam "making parts of it vertical, lots of scarps, and a lot of vertical erosion pieces very visible". He testified the existing spillway—two 24-inch concrete pipes—"was undersized". The spillway pipes feed into a corroding 36-inch metal pipe and is adjacent to an existing residence. On the dam there is also a guardrail, and attached to the guardrail is an existing force main that serves the town of Prince's Lakes. Kottlowski testified the dam is in "serious condition. It needs to be repaired and a new spillway needs to be installed that's capable of handling 50% possible maximum precipitation type storm."

¹ Petitioners' Exhibit 7 was filed with the Commission on March 12, 2010. Attached to this exhibit were Petitioners' Exhibits 1, 2 and 3.

² Statements made at the February 12, 2010 public hearing that are identified with quotation marks are intended to set off direct quotations. The audio quality of the recording was not always pristine. As a result, the statements should be considered as summaries and not as verbatim

Alan Hux asked, “Based on your experience as a consulting engineer, do you believe the district is necessary to provide the means and organization necessary to accomplish the purpose for which the district is being formed?”

Kottlowski answered, “I think some form of maintenance is necessary. Whether it’s a district or not, I think the district is a key tool to do that. I think, without it, there may be some problems doing otherwise.”

Kottlowski testified that he prepared or supervised the preparation of, Petitioners’ Exhibits 3, 5, and 6. Petitioners’ Exhibit 3, Project Summary, provides a brief description of the proposed project and “what’s being proposed”. He said the proposed project construction plans (Petitioners’ Exhibit 6) were submitted for review and consideration to the Department of Natural Resources, Division of Water, the U.S. Army Corps of Engineers, and to the Natural Resources Soil Conservation Service for erosion control purposes. Petitioners’ Exhibit 5 is the budget summary for the improvements of the Northwest Lake dam construction project, which indicates additional funding of approximately \$300,000 needed to complete the project.

Hux asked, “Based upon your experience, investigation, and the study that you have conducted of the Northwest Lake dam and spillway, do you believe the proposed district holds promise of engineering and economic feasibility?”

Kottlowski answered, “Yes.”

Hux asked, “Based upon your cost estimates the work that you have done with other lake areas in the Prince’s Lakes area, and the knowledge of the loss and value of homes located on the lake if the lake is no longer there, do you believe that the proposed district seems to offer benefits in excess of costs and damages?”

Kottlowski answered, “Yes.”

Hux then asked, “Have you done other projects, like this project, in the Prince’s Lakes area?”

Kottlowski answered, “Yes. I have done the dam for North Lake Conservancy District, as well as the dam owned by the East Lake Lot Owner’s Association.” He testified the proposed district would be compatible with other area conservancy districts, and believed that through his experience with other conservancy districts, the proposed district covers a proper area.

Alan Hux responded to questions from Jomary Baller, a representative of the Department of Natural Resources. He said the proposed district planned to cover the capital costs with an exceptional benefits tax. “Once the project is completed and the exceptional benefits are assessed against the lot owners, that would be used as a basis for the long-term financing, much like what has taken place with North Lake [Conservancy District]—that same methodology. If the exceptional benefit tax is not enough, which we don’t think that would be the case, we would use special benefit tax to supplement that. Special benefits will be used for ongoing lake and dam maintenance for future years.”

The Hearing Officer asked, “Is there communal green space within the proposed district or plans to include green space for the purpose of developing forests, wildlife areas, parks and recreational facilities in connection with beneficial water management?”

Hux answered, “That’s all one purpose. It’s all lumped together. That’s the lake, and the dam, and the area that’s there.” He said managing Northwest Lake would include “maintaining the lake as the lot owners have been doing through these number of years,” such as through sediment removal, weed and algae control, and reseeding along the shoreline. The exceptional benefits tax is estimated at \$16,000 per freeholder within the proposed district. “Based upon the experience we have had all the lake lots—each freehold—would have the same amount of exceptional benefit assessment.”

Hux said, “It’s the [Northwest Lake Lot Owner’s Association] Board’s feeling that if [it] does not get the [funding], the conservancy district is the only way [it] would be able to go out and get funding. Homeowner’s associations cannot get funding”.

Kottlowski testified periodic grass mowing would be required after project completion. This activity would cost approximately \$500 to \$1,000, annually, “if that much”. He testified the North Lake Conservancy District has a budget of \$400 to cover mowing, “but weed removal is an additional cost, which is more expensive,” approximately \$2,000 a year. Kottlowski also testified that North Lake Conservancy District’s annual budget, which includes costs for the required biennium dam inspection, is approximately \$12,000, “but [the proposed Northwest Lake Conservancy District] would be nowhere close to that number because of the physical area.” Because the Northwest Lake dam is not under the Department’s jurisdiction,³ Kottlowski indicated a statutory requirement for dam inspections at least every two years would not apply. Even so, he recommended a qualified engineer inspect the dam periodically.

Alan Hux said the Northwest Lake Lot Owner’s Association currently owns the dam and spillway, but if the proposed district is formed, ownership would be transferred to it.

II. STATE AGENCY COMMENTS

Indiana Utility Regulatory Commission

On February 15, 2010, DeAnna L. Brunner, Assistant General Counsel for the Indiana Utility Regulatory Commission, filed the following:

³ Attachment to the Department’s Memorandum, p. 12.



INDIANA UTILITY REGULATORY COMMISSION
101 W. WASHINGTON STREET, SUITE 1500E
INDIANAPOLIS, INDIANA 46204-3407



<http://www.in.gov/iurc>
Office: (317) 232-2701
Facsimile: (317) 232-6758

February 15, 2010

Jennifer M. Kane, Paralegal
Natural Resources Commission
Division of Hearings
100 N Senate Ave., Rm. N501
Indianapolis, IN 46204

Re: Petition for the Creation of the Northwest Lake Conservancy District

Dear Ms. Kane:

The General Counsel's Division of the Indiana Utility Regulatory Commission (the "Commission") has reviewed your letter and the Petitions regarding the creation of the Northwest Lake Conservancy District. This proposed conservancy district will, among other things, provide for the operations, maintenance and improvement of works of improvement, including, but not limited to, Northwest Lake and the Northwest Lake dam and spillway. It appears that the IURC is without jurisdiction over the petition as it does not relate to a public water supply.

Should you have questions, comments, or require additional information, please do not hesitate to contact me at 232-6735.

Sincerely,

DeAnna L. Brunner
Assistant General Counsel

Cc: Curt Gassert, Director of Water and Sewer Division

Indiana Department of Natural Resources

On April 14, 2010, Michael W. Neyer, Director of the Department of Natural Resources, Division of Water, filed the following:



**Division of Water
Memorandum**

Date: April 14, 2010

To: Jennifer Kane, Hearing Officer
NRC, Division of Hearings

From: Michael W. Neyer, PE
Director
DNR, Division of Water

Subject: Northwest Lake Conservancy District
Johnson County
District Establishment

On December 18, 2010, the Johnson Superior Court, Cause Number 41D03-0911-MI-0055, ordered that the petition filed for the formation of the Northwest Lake Conservancy District was complete as to form and content. In accordance with IC 14-33-2-17, the petition was filed with the Natural Resources Commission to prepare a factfinding report. The NRC forwarded the petition to the Division of Water for review and comment.

The proposed Northwest Lake Conservancy District is located on the Nineveh Quadrangle, Section 32, Township 11N, Range 4E, in the Town of Princes Lakes, in southeastern Johnson County. The Northwest Lake Dam (DNR file number #41-27) impounds the lake known as Northwest Lake which is immediately upstream of East Lake.

According to DNR files, the Northwest Lake Dam was constructed in the 1950's as a recreational impoundment, and is currently owned by the Northwest Lake Lot Owners Association. The dam is an earthen structure 19.9 feet height and 350 feet long, and the lake has a surface area of about 2.4 acres. The dam is classified as "significant" hazard according to accepted dam safety standards, but, does not meet the criteria to fall under the regulatory jurisdiction of the DNR.

The proposed Northwest Lake Conservancy District includes 18 freeholders (15 homes) and all freeholders have lake access. The petitioners request to be established for: 1) Developing forests, wildlife areas, parks and recreational facilities in connection with beneficial water management, and 2) Operation, maintenance and improvement of a work of improvement including, but not limited to Northwest Lake and the Northwest Lake Dam and spillway:

As directed by Chapter 2, Section 17 of the Indiana Conservancy Act (IC 14-33), and pursuant

to the Public Hearing held on February 23, 2010, concerning the proposed establishment of the Northwest Lake Conservancy District in Johnson County, the Division of Water offers the following comments.

1) Appears to be necessary

Purpose 1: Developing forests, wildlife areas, parks and recreational facilities in connection with beneficial water management:

At the February 23rd Public Hearing, the petitioners' attorney stated that under this purpose, the proposed district would assume the lake maintenance activities, such as sediment removal and weed control, currently provided by the Northwest Lake Lot Owner's Association. A representative for the Homeowners Association provided testimony that the establishment of a Conservancy District is necessary to obtain the funds necessary to carry out this purpose.

Purpose 2: Operation, maintenance and improvement of a work of improvement including, but not limited to Northwest Lake and the Northwest Lake Dam and spillway:

Based on information in DNR files, and testimony provided by a Professional Engineer at the February 23rd Public Hearing, the dam's condition is rated as conditionally poor. This rating indicates that further investigation and improvements are necessary.

Information provided at the February 23rd Public Hearing indicated that as the current dam owner, the Northwest Lake Lot Owner's Association, has not had the ability to obtain the necessary funds to perform the necessary improvements to the dam. If established, it is the intent of the petitioners to turn over the ownership of the dam to the Conservancy District.

The establishment of the Northwest Lake Conservancy District will set a mechanism in place to take over ownership of the dam, to borrow funds and collect assessments, to implement the necessary improvements, and to provide for long-term maintenance of the Northwest Lake Dam.

The establishment of the Northwest Lake Conservancy District appears to be necessary for both proposed purposes.

2) Holds promise of economic and engineering feasibility

Purpose 1: Developing forests, wildlife areas, parks and recreational facilities in connection with beneficial water management:

The petitioners' attorney testified at the February 23rd public hearing that the proposed activities to be carried out by the proposed Northwest Lake Conservancy District under this purpose are currently being performed by the Northwest Lake Lot Owner's Association, and that these activities include things such as sediment removal and weed control.

Weed control appears to be an activity that Northwest Lake Lot Owner's Association has implemented in the past; however, no detailed plan was submitted. In addition, sediment removal was discussed in testimony as a potential *future* activity of the proposed Northwest Lake Conservancy District. No engineering plan for this activity was submitted.

Detailed information and plans were not submitted for the proposed activities related to lake management; therefore, it is unknown if these activities hold promise of engineering feasibility.

Testimony submitted pursuant to the February 23rd Public Hearing from a representative of the Northwest Lake Lot Owner's Association stated that, historically, the association has budgeted \$2,000/year for maintenance of the lake and dam. A breakdown of these costs was not included.

Sediment removal was discussed in testimony as a potential future activity of the proposed Northwest Lake Conservancy District. Depending on the amount and type of sediment to be removed, as well as costs associated with sediment testing and disposal, sediment removal can, typically, be a costly activity. No cost estimates for sediment removal were submitted.

A cost breakdown was not submitted for the proposed activities related to lake management; therefore, it is unknown if these activities hold promise of economic feasibility.

Purpose 2: Operation, maintenance and improvement of a work of improvement including, but not limited to Northwest Lake and the Northwest Lake Dam and spillway:

Mr. Roger Kottlowski, PE, Commonwealth Engineers, Inc., performed an engineering analysis of the dam and prepared plans and cost estimates for improvements at the request of the Northwest Lake Lot Owners Association. Mr. Kottlowski testified and submitted information at the February 23rd Public Hearing, and explained that the primary deficiencies needing to be addressed include:

- Significant erosion and outlet pipe damage caused by dam overtopping during a June 2008 flooding event,
- Stability associated with the dam and spillway,
- Protection of a force main located on roadway located on the dam, and
- Needs for additional spillway capacity to safely pass the 50% Probably Maximum Precipitation (PMP) event.

Construction plans for needed improvements were prepared by or under the guidance of Mr. Kottlowski, PE, who is a Registered Professional Engineer with several years of experience in dam safety projects, and has worked on two other similar projects in this area.

Mr. Kottlowski submitted engineering plans to the DNR, Natural Resources Conservation Service, and the U.S. Army Corps of Engineers for review. A DNR response letter, dated May 26, 2009, is attached and states that the plans confirm that the dam is not within the regulatory jurisdiction of the DNR and that the improvements should not change the status.

A comprehensive list of maintenance activities needs was not submitted; however, mowing of the dam was discussed at the public hearing as a dam maintenance activity that would be performed by the Northwest Lake Conservancy District. Once the dam improvements are completed, additional details regarding dam maintenance and inspection activities should be pursued with the designer.

The proposed improvements to the dam appear to hold promise of engineering feasibility. Detailed information related to dam maintenance activities was not submitted; therefore, it is unknown if the long-term maintenance activities hold promise of engineering feasibility.

The costs associated with the proposed improvements, including engineering services, are estimated at \$300,000. These costs appear reasonable for the type of work needed on the structure.

The proposed Northwest Lake Conservancy District intends to take over ownership and long-term maintenance responsibilities of the dam. Testimony submitted pursuant to the February 23rd Public Hearing stated that, historically, the association has budgeted \$2,000/year for maintenance of the lake and dam. A breakdown of maintenance costs was not included.

The proposed improvements to the dam appear to hold promise of economic feasibility. Detailed information related to the costs associated with dam maintenance activities were not submitted; therefore, it is unknown if the long-term maintenance activities hold promise of economic feasibility.

3) Seems to offer benefits in excess of costs

The proposed District will collect and manage funds to implement needed improvements and provide for long-term maintenance of the Northwest Lake Dam.

Testimony submitted pursuant to the February 23rd Public Hearing set forth the anticipated plan for covering the costs of both the proposed dam improvements and the lake and dam maintenance activities. This testimony indicated that the proposed Northwest Lake Conservancy District would pursue an exceptional benefits tax for the costs associated with the proposed improvements to the dam of \$300,000, and, if needed, a special benefit tax would be used to make up any deficiency. It was further stated that for the 18 freeholders, this would equal approximately \$16,666 per household. In addition, it is anticipated that a special benefit tax would be used to provide for the \$2,000/year lake and dam maintenance activities, which would equal approximately \$111/year per freeholder.

According to testimony, it is believed that, if the dam was breached and the lake was gone, the freeholders would experience a loss in property value that exceeds \$16,666. However, no detailed information related to property values/assessments and associated project benefits for the properties at Northwest Lake were submitted.

If the needed improvements were not made, and appropriate maintenance provided, the dam would continue to deteriorate. An unsafe structure could eventually lead to dam failure and/or breach, and could potentially damage the road and utilities on top of the dam. In addition, the loss of the lake would lead to decreased property values and decreased recreational benefits for the residents in the area. However, detailed information to lead to a benefit-cost assessment was not submitted.

Detailed information related to the property values and associated project benefits at Northwest Lake was not submitted; therefore, it is unknown if the benefits exceed the costs.

4) Proposes to cover and serve a proper area

Chapter 3 of the Indiana Conservancy Act states that "any area may be established as a district if each part of the district is contiguous to another part". The boundaries of the proposed Northwest Lake Conservancy District are contiguous.

Northwest Lake is a recreational lake. The proposed boundaries include the property owners who have access to the lake and who will benefit from the establishment of the District.

The proposed Northwest Lake Conservancy District boundaries appear to cover and serve a proper area.

5) Could be established and operated in a manner compatible with established Conservancy Districts, flood control projects, reservoirs, lakes, drains, levees, and other water management or water supply projects

There are four (4) other Conservancy Districts located in the vicinity of the proposed Northwest Lake Conservancy District, within the Town of Princes Lakes: White Lake, Northeast Lake, Hants Lake, and North Lake. All of these Districts were primarily established to improve and/or maintain the dam and recreational opportunities of the lake located within their respective boundaries. No other Conservancy District's boundary overlaps the boundaries of the proposed Conservancy District. The proposed district does not appear to interfere with any other known flood control or water management areas.

Within the parameters of the Division of Water review, and according to testimony provided at the February 23rd Public Hearing, the proposed Northwest Lake Conservancy District could be established and operated in a manner compatible with established Conservancy Districts, flood control projects, reservoirs, lakes, drains, levees, and other water management or water supply projects.

Attachment: DNR Letter, May 26, 2009



Indiana Department of Natural Resources

Mitchell E. Daniels, Jr., Governor
Robert E. Carter, Jr., Director

Division of Water
402 W. Washington Street
IGCS - Room W264
Indianapolis, Indiana 46204
Telephone: (317) 232-4160
Toll Free: (877) 928-3755

May 26, 2009

Mr. Roger Kottowski, P.E.
Project Manager
Commonwealth Engineers, Inc.

Re: Northwest Lake Dam, 41-27
Johnson County

Dear Mr. Kottowski:

Thank you for the March 2, 2009 letter and engineering plans (certified by you on March 2, 2009) showing the proposed improvements to the Northwest Lake Dam in Johnson County.

Your evaluation confirms that the existing dam is not within the Indiana Department of Natural Resource's (IDNR) jurisdiction. Further, the proposed work should not change the jurisdictional status. IDNR will assign the "under minimum" structure status to this dam.

Although the Northwest Lake Dam is not within IDNR's jurisdiction, staff would appreciate notification of when the proposed work is complete.

Please contact Mr. George Crosby, Dam & Levee Safety Section Manager, at 317-233-4576 (or toll free 1-877-928-3755) if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth E. Smith", is written over a horizontal line.

Kenneth E. Smith, P.E.
Assistant Director
Division of Water

KES/GWC

Cc:
Mr. A.O. Taylor, Northwest Lake Association, Inc.

File

III. PROPOSED RECOMMENDATIONS

As the statutory responsibilities of the Commission are applied to the proposed Northwest Lake Conservancy District, the Commission shall make a determination under Ind. Code § 14-33-2-17 and report to the Johnson Superior Court whether the proposed district, for the purposes of (1) Developing forests, wildlife areas, parks, and recreational facilities in connection with beneficial water management; and (2) operation, maintenance and improvement of works of improvement including, but not limited to Northwest Lake and the Northwest Lake dam and spillway, meets the following conditions:

- (1) The proposed district appears to be necessary.
- (2) The proposed district holds promise of economic and engineering feasibility.
- (3) The proposed district seems to offer benefits in excess of costs and damages.
- (4) The proposed district proposes to cover and serve a proper area. Included in this condition is whether, under IC 14-33-3-1, each part of the district is contiguous to another part.
- (5) The proposed district could be established and operated in a manner compatible with established:
 - (A) conservancy districts;
 - (B) flood control projects;
 - (C) reservoirs;
 - (D) lakes;
 - (E) drains;
 - (F) levees; and
 - (G) other water management or water supply projects.

Within this statutory structure, the following findings are recommended to the Johnson Superior Court with respect to the proposed Northwest Lake Conservancy District:

Purpose: Developing forests, wildlife areas, parks and recreational facilities in connection with beneficial water management

Whether the proposed district appears to be necessary

Northwest Lake was created as a recreational impoundment during the 1950s and is one of a system of lakes within the Prince's Lakes area. It is one of the smallest lakes in the Prince's Lakes system and has a drainage area of 0.11 square mile with a surface area of about three acres.⁴ The White Lake Conservancy District, North Lake Conservancy District, Northeast Conservancy District, and Hants Lake Conservancy District, within the Prince's Lakes area, were established for similar purposes as the proposed district.

⁴ Petitioners' Exhibit 4.

In June 2008, the Northwest Lake dam was overtopped and sustained damage on the downstream side of the dam.⁵ With the completion of improvements to the Northwest Lake dam, a maintenance program is needed.⁶ Currently, the Northwest Lake Lot Owner's Association owns the Northwest Lake dam. If established, the Northwest Lake Conservancy District would manage and maintain the Northwest Lake dam and ancillary structures. This approach would help protect the integrity of the water management infrastructure.

The Northwest Lake Lot Owners Association does not have the funding or expertise required to properly manage and maintain the Northwest Lake dam for developing forests, wildlife areas, parks and recreational facilities in connection with beneficial water management. The proposed district appears to be necessary.

Whether the proposed district holds promise of economic and engineering feasibility

The proposed Northwest Lake Conservancy District would benefit freeholders within the proposed district and the surrounding community by appropriate dam maintenance. Commonwealth Engineering inspected the Northwest Lake dam and found the dam has a "marginal stability"⁷. An engineering report, Petitioners' Exhibit 4, which lists remedies required to improve the dam's safety, was provided to the Northwest Lake Lot Owner's Association. Attached to the dam is a guardrail, and attached to the guardrail is an existing force main that serves the Town of Prince's Lakes. Dam improvements would help assure stability and integrity of the guardrail and the Town's force main, as well as helping to preserve the recreational values of Northwest Lake.

The responsibilities of the Northwest Lake Lot Owner's Association would be shifted to the proposed Northwest Lake Conservancy District, including dam improvement, maintenance, dam mowing, aquatic weed control, and sediment removal. The Department of Natural Resources (the "Department"), Division of Water found these responsibilities are "appropriate lake management activities to be continued by the proposed conservancy district."⁸ Historically, the Northwest Lake Lot Owner's Association budgeted \$2,000 annually for dam and lake maintenance. The Lot Owner's Association believes the current budget assessed on a prorated basis, or \$111.00 per freeholder per year, would continue to be a reasonable annual maintenance budget for the proposed district.⁹ The Petitioners did not provide evidence regarding the Lot Owner's Association's current maintenance activities or a budget summary for those activities.

Testimony was presented that \$500 to \$1,000 would be required to cover costs for grass mowing.¹⁰ The Lot Owner's Association foresees the necessity for sediment removal from Northwest Lake.¹¹ Aquatic weed control was estimated to cost approximately \$2,000.¹²

⁵ *Testimony of Kottlowski*, p. 3.

⁶ *Id.* at 4.

⁷ Petitioners' Exhibit 4.

⁸ Natural Resources Commission report, *In re Petition for Creation of the Hants Lake Conservancy District*, 41C01-0312-MI-00018 (2004), p. 6.

⁹ Affidavit of Karen Dark, *Direct Testimony*, ¶ 19.

¹⁰ *Testimony of Kottlowski*, p. 5.

¹¹ Affidavit of Karen Dark, *Direct Testimony*, ¶ 16.

¹² *Testimony of Kottlowski*, p. 5.

Evidence was not presented regarding the presence of aquatic weeds, the current sediment load within Northwest Lake, or when removal of sediment would be required. The proposed Northwest Lake Conservancy District may supplement its budget for the maintenance repair and operation of the works of improvements necessary for developing forests, wildlife, parks and recreational facilities in connection with beneficial water management through both annual levy of special benefit taxes and an annual assessment on land found to be exceptionally benefitted.¹³

The proposed conservancy district as a quasi-governmental entity affords the mechanism for operation, maintenance, and improvements of the Northwest Lake dam including funds management. The proposed district holds promise of economic and engineering feasibility for the purpose of developing recreational facilities in connection with beneficial water management.

Whether the proposed district seems to offer benefits in excess of costs and damages

Dams are commonly used to provide recreational resources and can enhance property values, but they must be properly maintained to realize their potential.¹⁴ The Department has classified the Northwest Lake dam as a “significant hazard”¹⁵. A significant hazard is a structure the failure of which may damage isolated homes and highways or cause the temporary interruption of public utility services.¹⁶ The failure of this dam has the potential for damaging residences along East Lake.¹⁷ The Northwest Lake community is pursuing remedies through a conservancy district mechanism to rehabilitate the dam and spillway.

The failure of even small dams can result in serious injuries, fatalities, and extensive property damage. The dam owner loses a valuable asset and faces reconstruction costs and possible liability for downstream damages.¹⁸ The loss of the Northwest Lake would lead to decreased property values and decreased recreational opportunities.¹⁹ The benefits gained from developing recreational facilities in connection with beneficial water management in relation to costs and damages are partly intrinsic in nature and may be partly impossible to quantify. An overall benefit to cost ratio was not provided, but the benefits of dam improvement and continued maintenance far exceeds all consequential costs of dam failure. The proposed district seems to offer benefits in excess of costs and damages.

Whether the proposed district proposes to cover and serve a proper area

Northwest Lake is located within the boundaries of the proposed conservancy district. All property with lake access is included in the proposed district boundaries. All property within the proposed district is contiguous. The district, as proposed for the purpose of developing recreational facilities in connection with beneficial water management, covers and serves a proper area.

¹³ Petitioners Exhibit 1, ¶ 6.

¹⁴ Indiana Dam Safety Inspection Manual, 2007, § 1.1, Figure 1-1, p. 1-1; <http://www.in.gov/dnr/water/3593.htm>.

¹⁵ Department Memorandum, p. 7 of this document.

¹⁶ Indiana Dam Safety Inspection Manual, § 1.6, p. 1-8.

¹⁷ Petitioners' Exhibit 4.

¹⁸ Indiana Dam Safety Inspection Manual, § 1.4.2, p. 1-5.

¹⁹ Department Memorandum, p. 10 of this document.

Whether the proposed district could be established and operated in a manner compatible with established: conservancy districts; flood control projects; reservoirs; lakes; drains; levees; and other water management or water supply projects.

Evidence presented by the Petitioners as well as state agency comments filed during this proceeding establish there does not exist, near the proposed district boundaries, a water management or a water supply project to which the Northwest Lake Conservancy District would interfere. The proposed district would be compatible with the existing conservancy districts within the Prince's Lakes area.

Purpose: Operation, maintenance and improvement of works of improvement, including North Lake and the North Lake dam and spillway

Whether the proposed district appears to be necessary

The Department characterized the Town of Prince's Lakes, where Northwest Lake is located, as "a unique community where nearly a quarter of the area in the corporate boundary is covered by lakes. All the lakes are manmade and exist because of the dams constructed across the valley. Failure of any of the dams would cause damage downstream, loss of the lake for residents...and in most cases, a loss of access and utilities to the community. The Prince's Lakes' dams were constructed in the 1950s without approved engineering design plans. Since the dams were not properly designed or constructed, there are significant safety deficiencies that substantially increase the risk of failure of these structures."²⁰

Roger M. Kottowski, a professional engineer from Commonwealth Engineering, Inc., inspected the Northwest Lake dam after the June 2008 flood event and submitted to the Northwest Lot Owner's Association a letter report listing "key concerns" regarding the dam and spillway, which included in part, as follows:

1. This dam has been classified as a significant hazard dam. A failure of this dam has the potential for damage to residences along East Lake.
2. The dam is classified as conditionally poor. The following is an excerpt from the IDNR dam inspection manual, "a potential safety deficient is recognized for unusual loading conditions which may realistically occur during the expected life of the structure. Conditionally poor may also be used when uncertainties exist as to critical analysis parameters which identify a potential dam safety deficiency; further investigations and studies are necessary."
3. The primary outlet consists of 2- 24 inch concrete pipe leading to an underground concrete box. From there a 36-inch corrugated metal pipe exits the box down the slope to East Lake. The area around the junction box is leaking, creating suction holes around it. The corrugated metal pipe has also corroded along the flow line and may be degraded further upstream towards the junction box.

²⁰Natural Resources Commission Report, filed November 15, 2005, *In re Petition for the Creation of the North Lake Conservancy District*, Johnson Circuit Court, 41D01-0410-MI-43, p. 10.

4. The downstream slope is on a very steep slope of perhaps 1½:1 or steeper. The dam was overtopped, and water eroded the downstream side slope that was covered with riprap. A number of scarps were formed that come close to vertical.
5. After reviewing the dam we found some pockets of standing water, but we did not find flowing water.
6. This dam needs to be monitored daily and after any rainfalls. The owner may need to lower this lake if conditions worsen.

Petitioners' Exhibit 4, p. 2.

The establishment of the Northwest Lake Conservancy District will set a mechanism in place to take over ownership of the dam, to borrow funds, and collect assessments, to implement the necessary improvement, and to provide long-term maintenance of the Northwest Lake dam.²¹ Kottlowski testified that the proposed district is a "key tool" to oversee the required maintenance and operation of the Northwest Lake dam and lake area.²²

Dams require an on-going inspection and maintenance program to insure their continued safety and useful life.²³ The proposed district appears to be necessary for the purpose of operation, maintenance and improvement of works of improvement, including Northwest Lake and the Northwest Lake dam and spillway.

Whether the proposed district holds promise of economic and engineering feasibility

The Northwest Lake dam is an earthen dam just under 20 feet high and 350 feet long.²⁴ The June 2008 flood event caused the downstream side of the dam to undergo severe erosion and is very steep.²⁵ According to the engineer's letter report, a toe drain will be constructed to assist in lowering the internal water level, and a new 60-inch concrete outlet pipe is proposed to be installed. The new spillway will be designed to handle 50% probable maximum precipitation.²⁶ The proposed dam improvement project construction plans, Petitioners' Exhibit 6, were submitted for review and consideration by the U.S. Army Corps of Engineers, the Natural Resources Soil Conservation Service for erosion control purposes, and to the Department. The Northwest Lake dam is not within the Department's jurisdiction, and the proposed improvement work should not change the jurisdictional status.²⁷

The costs associated with the proposed dam improvements, including engineering services, are estimated at \$300,000, which the Department finds "reasonable".²⁸ Testimony was presented to support the finding that the proposed district holds promise of engineering and economic feasibility.²⁹ Each of the 18 freeholds within the proposed district would be assessed an exceptional benefits tax of \$16,666 to cover the estimated dam improvement costs.³⁰ Even

²¹ Department Memorandum, p. 8 of this document.

²² *Testimony of Kottlowski*, p. 4.

²³ Indiana Dam Safety Inspection Manual, § 1.1, p. 1-1.

²⁴ Petitioners' Exhibit 3.

²⁵ Petitioners' Exhibit 4.

²⁶ *Testimony of Kottlowski*, p. 3.

²⁷ Department Memorandum Attachment, p. 12 of this document.

²⁸ Department Memorandum, p. 10 of this document

²⁹ *Testimony of Kottlowski*, p. 4.

³⁰ Affidavit of Karen Dark, *Direct Testimony* ¶ 22.

though evidence was not presented as to the financial capability of the freeholds to cover the costs for these improvements, dam owners should be financially prepared to perform necessary dam inspections, maintenance, and repairs. A reserve monetary fund to cover required expenses throughout the life of the dam should be established and maintained. The owner would need to estimate the required annual expenditures to establish an appropriate financial mechanism.³¹

Other conservancy districts within the Prince's Lake area were established for similar purposes as the proposed Northwest Lake Conservancy District. The responsibilities of the Northwest Lake Lot Owner's Association will be shifted to the proposed Northwest Lake Conservancy District, including dam maintenance, aquatic weed control, and sediment removal. The conservancy district as a mechanism for the operation, maintenance, and improvement of lakes and dams is a proven method and holds promise of economic and engineering feasibility.

Whether the proposed district seems to offer benefits in excess of costs and damages

The primary focus of any dam safety effort is the protection of lives and property in the area downstream from the impoundment.³² Many of the dams in the Prince's Lakes area "will either impact the safety of another downstream dam or will be impacted by the safety of another upstream dam. There are dams 'stacked up' above the lower dams in the same watershed. Failure of an upstream dam is likely to create a domino effect of failures down the drainage way."³³ Since 1998, several conservancy districts have been established in the Prince's Lakes area for similar purposes as the proposed district to address dam safety issues.

Even if the Northwest Lake dam does not fall under the Department's jurisdiction, it would be prudent for the Northwest Lot Owner's Association, or subsequently, the Northwest Lake Conservancy District if created, to develop a dam safety program that includes safety inspections, and an operation and maintenance plan.³⁴ "A good safety inspection and maintenance program is also important to the owner's bottom line. The typical dam represents a considerable cash investment. Loss of the dam could result in the loss of a water source, recreational facility, flood protection, or other assets."³⁵

The Lot Owner's Association has not been able to obtain the funding for the dam repairs.³⁶ "If the needed improvements were not made, and appropriate maintenance provided, the dam would continue to deteriorate. An unsafe structure could eventually lead to dam failure and/or breach, and could potentially damage the road and utilities on top of the dam."³⁷ Testimony indicated that if the dam were breached, the freeholds would suffer a loss in value in excess of \$16,666.³⁸

³¹ Indiana Dam Safety Inspection Manual, § 3.1, p. 3-1.

³² *Id.* at § 1.1, p. 1-1.

³³ Natural Resources Commission Report filed November 15, 2005, *In re: Petition for Creation of the North Lake Conservancy District*, p. 17.

³⁴ Indiana Dam Safety Inspection Manual, § 1.2, p. 1-2.

³⁵ *Id.* at § 1.1, p. 1-1.

³⁶ Affidavit of Karen Dark, *Direct Testimony* ¶ 19.

³⁷ Department Memorandum, p. 10 of this report.

³⁸ Affidavit of Karen Dark, *Direct Testimony*, ¶26.

Kottlowski testified that he was involved in the design and rehabilitation of the dams associated with the North Lake Conservancy District and the East Lake Lot Owners Association, and the Northwest Lake Conservancy District seems to offer benefits in excess of costs and damages.³⁹ The proposed Northwest Lake Conservancy District will manage and maintain the North Lake dam and ancillary structures, which will protect the integrity of the water management infrastructure. The proposed Northwest Lake Conservancy District will benefit freeholders within the proposed district and the surrounding community by appropriate dam maintenance.

The Northwest Lake Lot Owners Association does not have the funding or expertise required to properly manage and maintain the Northwest Lake dam. The proposed district appears to be necessary.

Whether the proposed district proposes to cover and serve a proper area

The Petitioner's engineer testified that the proposed Northwest Lake Conservancy District covers a proper area.⁴⁰ Petitioners' Exhibit 2, and attached to this report as "Exhibit A", supports the finding that the conservancy district boundaries, as proposed, are contiguous. The proposed boundaries include the property with access to the lake. The Department indicates the proposed district proposes to cover and serve a proper area.⁴¹

For the purpose of operation, maintenance and improvement of works of improvement, including North Lake and the North Lake dam and spillway, the Northwest Lake Conservancy District proposes to cover and serve a proper area.

Whether the proposed district could be established and operated in a manner compatible with established: conservancy districts; flood control projects; reservoirs; lakes; drains; levees; and other water management or water supply projects.

The Prince's Lakes area contains a network of lakes, with several existing conservancy districts whose purposes are very similar to the proposed district. White Lake Conservancy District (formed in 1987), Northeast Conservancy District (2002), Hants Lake Conservancy District (2004), and North Lake Conservancy District (2006). The existing districts were established to address safety issues of their respective dams. Testimony indicates the proposed district could be compatible with other water management projects.⁴² The proposed Northwest Lake Conservancy District could be established and operated in a manner compatible with existing conservancy districts, and other water management projects.

³⁹ *Testimony of Kottlowski*, p. 4.

⁴⁰ *Id.*

⁴¹ Department Memorandum, p. 11 of this document.

⁴² *Testimony of Kottlowski*, p. 4.

VI. RECOMMENDATION

The foregoing is approved and adopted as the determination and fact finding report of the Natural Resources Commission under Indiana Code § 14-33-2-17.

Dated: April 21, 2010

Jennifer M. Kane
Hearing Officer

A copy of the foregoing was sent to the following:

Alan M. Hux
Attorney
Taft Stettinius & Hollister LLP
One Indiana Square, Suite 3500
Indianapolis, Indiana 46204-2023

Cc: Jomary Baller, DNR, Division of Water